



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/682,247

10/09/2003

Daniel R. Dorrance

HE 8710US

1016

1688

7590

05/19/2006

POLSTER, LIEDER, WOODRUFF & LUCCHESI  
12412 POWERSCOURT DRIVE SUITE 200  
ST. LOUIS, MO 63131-3615

EXAMINER

RATCLIFFE, LUKE D

ART UNIT

PAPER NUMBER

3662

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/682,247	<b>Applicant(s)</b> DORRANCE ET AL.	
	<b>Examiner</b> Luke D. Ratcliffe	<b>Art Unit</b> 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 2,3,9,19,21,22,24 and 26-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9,22,24,26,27,29 and 30 is/are allowed.
- 6) ☒ Claim(s) 2,3,19,21 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Jackson (6731382).**

Referring to **claim 2**, Jackson shows a machine vision vehicle wheel alignment system with a first camera system and second camera system that have a variable position relationship (figure 4), a fixed reference target structure (figure 6b Ref 147-MC), and a data processor that uses the relationships between the fixed reference target structure, the first camera system, and the second camera system to establish a common reference coordinate system (paragraph 51).

**Claims 19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by January (5675515).**

Referring to **claim 19**, January shows an improved machine vision vehicle wheel alignment system with at least one unique reference target structured associated with the service bay disposed within the view of at least one camera from the first and second camera systems (figure 5 Ref 73), and a data processor is configured to utilize identified relationships between at least one unique reference target structure and the

Art Unit: 3662

camera systems to establish a common reference coordinate system (column 12 lines 45-62). Referring to the unique reference target structure associated with the service bay, the reference target structure is attached to the lift used to lift the car, each lift is unique in size, style, and location in each service bay therefor rendering the lift a part of the service bay. This reference target structure is disposed on the lift of the service bay and therefor is a unique reference target structure associated with the service bay.

Referring to **claim 21**, January shows an improved machine vision vehicle wheel alignment system wherein the data processor is further configured to store one or more calibration values associated with the service bay (column 11 lines 21-45).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 3 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson (6731382) in view of January (5675515).**

Referring to **claim 3**, Jackson shows a machine vision vehicle wheel alignment system with a first camera system and second camera system that have a variable position relationship (figure 4), a fixed reference target structure (figure 6b Ref 147-MC), and a data processor that uses the relationships between the fixed reference

Art Unit: 3662

target structure, the first camera system, and the second camera system to establish a common reference coordinate system (paragraph 51).

January shows a reference target structure that includes a first target disposed within the field of view of the first camera (figure 5 Ref 75) and a second target disposed within the field of view of the second camera (figure 5 Ref 74). It would have been obvious to modify Jackson to include the target structure taught by January because this allows the two cameras to have different targets disposed further apart from one another that allows easier mounting of the camera systems.

Referring to **claim 28**, Jackson shows a machine vision vehicle wheel alignment system with a first camera system and second camera system that have a variable position relationship (figure 4), a fixed reference target structure (figure 6b Ref 147-MC), and a data processor that uses the relationships between the fixed reference target structure, the first camera system, and the second camera system to establish a common reference coordinate system (paragraph 51).

January shows a fixed target structure that has a first optical target disposed on the first side of a vehicle that is able to be viewed by the first camera system and a second target on the second side of the vehicle that is able to be viewed by the second camera system (figure 4). It would have been obvious to modify Jackson to include the target structure taught by January because this allows the two cameras to have different targets disposed further apart from one another that allows easier mounting of the camera systems.

### ***Response to Arguments***

Applicant's arguments filed 2/28/06 have been fully considered but they are not persuasive. With respect to **claim 2**, the argument that the reference Jackson has two camera systems that have dedicated calibration cameras and that these calibration cameras view the calibration target and no other optical targets is correct however, they are still part of the first and second camera systems, the camera system as claimed can include multiple cameras and there is no restriction in the claim or the specification of the application as to cameras that only view a calibration target.

With respect to **claim 19**, the unique reference target structure associated with the service bay, the reference target structure is attached to the lift used to lift the car, each lift is unique in size, style, and location in each service bay therefor rendering the lift a part of the service bay. This reference target structure is disposed on the lift of the service bay and therefor is a unique reference target structure associated with the service bay.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

Art Unit: 3662

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Allowable Subject Matter***

Claims **9, 22, 24, 26, 27, 29, and 30** are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke D. Ratcliffe whose telephone number is 571-272-3110. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3662

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LDR

LDR



THOMAS H. TARCZA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600